

DOCUMENT RESUME

ED 086 158

IR 000 004

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TITLE Adult Learner Characteristics and Their Responsiveness to Multi-Media Instructional Programs Designed for an Open University System.
INSTITUTION Nebraska Univ., Lincoln. State Univ. of Nebraska.
SPONS AGENCY Office of Education (DHEW), Washington, D.C.
PUB DATE 73
GRANT OEG-O-72-0457
NOTE 3p.; See also IR 000 003

EDRS PRICE MF-\$0.65 HC-\$3.29
DESCRIPTORS Accounting; Adult Education Programs; *Adult Learning; Adult Students; Educational Research; Evaluation; *External Degree Programs; Higher Education; *Individual Characteristics; Instructional Design; Instructional Materials; Instructional Television; *Multimedia Instruction; *Open Education; Phonotape Recordings; Psychology; Student Attitudes; Televised Instruction

IDENTIFIERS Open Learning System; *Open University System

ABSTRACT

Research investigated the relationships between the characteristics of adult learners, aged 17 to 67, and their responses to learning via multi-media instructional programs. Students read materials in accounting and psychology, viewed video lessons and listened to audio tapes; post-treatment data were then collected. Results showed that: 1) the adult learner's educational level, enjoyment of educational television, self-concept, past academic achievement and future educational plans were all positively related to his reactions to innovative techniques; 2) general interest in the lesson was related to the degree to which the learners found the material useful; 3) reactions regarding both interest and usefulness varied for different subjects and different instructional formats; and 4) achievement of posttests was related to different learner characteristics for different subjects. It was concluded that adult learners reacted positively to the mediated approaches, but that both subject matter and personal characteristics influenced achievement and student acceptance. This suggested that the design of instructional materials for adults in an open learning system will need to consider the subject matter at hand, as well as the specific nature of the target population, their interests and their backgrounds. (Author/LB)

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Adult Learner Characteristics and Their Responsiveness
to Multi-Media Instructional Programs Designed
for an Open University System

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EDUCATION & WELFARE
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Purpose

One of the major thrusts of higher education today is to make college credit more accessible to people wherever they may live or work or whatever their particular life circumstances. Accessibility currently implies more than open admissions and more residence halls. It means reaching students where they are at physically and educationally.

The State University of Nebraska (S-U-N) is designed to be a multi-media off-campus approach to college education, similar to England's Open University. S-U-N will utilize a variety of media and means to provide college credit courses for adults. Lesson materials include newspaper articles, broadcast television, audio cassettes, and textual materials. Instructional formats are designed to be appealing, as well as instructional. It is hoped that the materials, particularly the broadcast TV lessons, will attract and maintain the interest of adult learners.

The purpose of this study was to determine the interrelationships between characteristics of adult learners and their responses to learning via multi-media instructional programs which include broadcast television, audio cassettes, and textual materials. There were four research questions:

- 1) Are initial attitudes and backgrounds related to reactions to lesson materials?
- 2) Are there relationships between attitudes and reactions to the entire lesson package?
- 3) Are there relationships between attitudes and reactions to the individual lesson components?
- 4) Is there a relationship between attitude and achievement?

Answers to these questions promise to have an impact on all phases of lesson design and production.

Methodology

Subjects included 250 individuals ranging in ages from 17 to 67. They included volunteers and subjects who had expressed an interest in actually taking a college course through an open learning system.

This research was completed as part of the activities related to Grant #OEG-0-72-0457.

The subjects read related lesson materials; viewed video lesson segments, and listened to audio cassette lessons in college Accounting and Psychology. Prior to and after exposure to the lessons the subjects completed personal information forms, responded to attitude questionnaires, and gave their reactions to the lesson formats. All subjects were debriefed in small groups by trained interviewers.

Data analysis was primarily correlational and factor analysis. Median reliability of attitude scales was .75.

Results

The results can be summarized in reference to the four major questions that were asked:

1. Initial attitudes and backgrounds of the adult learners were significantly related to their reactions to the educational techniques. Reactions were significantly related to the adult learner's level of education, enjoyment of educational television, concept of self as a student, thoughts about future education, and past academic achievement. All were positively related to reactions to the new educational techniques.

2. General interest in the overall lesson was related to the degree to which the learners found the material useful. There was a high relationship between achievement and general interest in Psychology, but not Accounting. Students who were predisposed to obtaining more education were also more likely to be favorable to the lessons.

3. Reactions to the different content material, Psychology and Accounting, were quite distinct. Usefulness ratings of the TV were related to achievement in Psychology, but not Accounting. On the other hand, interest ratings, not usefulness, for Accounting were significantly correlated with achievement. Reactions to audio cassette lesson materials were related to initial attitudes toward educational television. Interest ratings for reading materials were significantly related to how much time was spent reading and for Accounting lesson to achievement.

4. Achievement on the Accounting content tests was significantly correlated with level of education, past academic achievement, ratings of usefulness and interest. Achievement on the Psychology post content test was also significantly correlated with level of education and past academic achievement.

Conclusions and Implications

In general, adult learners reacted quite positively to the new mediated approaches to providing college lesson materials. There was, however, enough variation in responses to suggest that key personal characteristics were related to acceptance and achievement. Level of education, enjoyment of educational television, concept of self as a student, thoughts about future education, and past academic achievement were all positively related to responses. The data clearly suggests that variation in responses are also related to the nature of the subject matter.

This suggests that design and production of lesson materials for an open learning system for higher education will need to consider the specific nature of the target population, their interests and backgrounds. Although it will be difficult to find specific lesson formats that are equally appealing and effective with all kinds of students, further research may help to identify the key lesson characteristics, as well as the key learner characteristics, which promise to have universal appeal and effectiveness.